

STATE OF VERMONT
PUBLIC SERVICE BOARD

Order re Geographic Targeting of Energy)
Efficiency Utility Funds in 2009 - 2011)

Order entered: 11/4/2008

I. INTRODUCTION

In this Order, the Public Service Board ("Board") determines the scope of the Energy Efficiency Utility's ("EEU") geographic-targeting efforts for the 2009 through 2011 time period.¹ The Board has determined that Efficiency Vermont shall continue geographic-targeting efforts in the existing Southern Loop, Chittenden County, and St. Albans areas, and expand the targeting efforts within the Chittenden County area and to the Rutland area, as described below.

II. BACKGROUND

On September 25, 2006, the Board issued an Order determining that a portion of the EEU's budget would be spent on targeting energy efficiency services in specific geographic areas. In the September 25 Order, the Board stated:

Capacity reductions during peak times can help reduce the need to upgrade transmission and distribution infrastructure. In addition, peak-capacity savings also produce peak-energy savings. These can be among the most cost-effective energy-efficiency savings to acquire because they avoid the highest-priced electricity. Therefore, we conclude that targeting the 2006 EEU funds in this manner will further the statutory objective of targeting energy-efficiency activities in ways that provide the greatest value.

Specific geographic areas were identified in a January 8, 2007, Order, after reviewing the results of a technical workshop and written filings by the electric distribution utilities and the Department of Public Service ("Department"). The January 8 Order directed the EEU to

1. EEU geographic targeting efforts are energy efficiency services that are targeted to those circuits and substations that are facing capacity constraints to avoid or defer system upgrades.

implement targeted efficiency efforts in portions of St. Albans, the Southern Loop,² Chittenden County, and Newport.

The geographic areas were broadly defined in the January Order, with the primary goal being to target efficiency services to relieve constraints associated with specific substations; the programs to relieve these constraints are aimed at customers served by the substations, regardless of whether they are located in the actual town identified. For example, customers located in a town adjacent to St. Albans might be eligible for participation in the geographic targeting efforts; the main concern is whether the customer is served by a constrained substation. In addition, we provide Efficiency Vermont with some latitude to define the geographic areas for purposes of implementing the program. Accordingly, the geographic areas, existing and proposed, are not precisely defined by the Board in this Order.

On August 29, 2008, the Board issued an Order establishing the EEU budgets for the 2009-2011 time period. In the August 29 Order, the Board stated:

We have determined that it is appropriate to continue the geographic-targeting efforts, at least through 2011. Further information is needed to determine when geographic areas will reach the saturation point with respect to implementation of current energy efficiency programs. As further information is developed it is possible that geographic targeting will be discontinued in some areas and implemented in new areas. The Board will direct staff to develop further information, either through written filings or a workshop process, to determine the specific areas that should be geographically targeted for capacity reductions in the 2009-2011 budget period.

The August 29 Order further specified that \$12.2 million of each year's EEU budget would be directed towards geographic targeting.

On August 25, 2008, CVPS and Green Mountain Power Corporation ("GMP") filed a joint letter recommending that the Board: (1) continue geographic-targeting efforts in the Southern Loop, St. Albans, and Chittenden County areas; (2) expand geographic targeting to three new regions in CVPS's service territory; and (3) expand targeted efforts in the Chittenden County area identified in the Board's January 8 Order.

2. The Southern Loop encompasses an area served by a Central Vermont Public Service Corporation ("CVPS") subtransmission line that serves areas from Bennington to Vernon, and includes the Manchester and Stratton areas.

On October 1, 2008, Board staff held a workshop to discuss the filings received on this issue and determine what additional information was required for the Board to make a decision regarding geographic targeting for the 2009-2011 time period. The workshop included a presentation by Efficiency Vermont regarding its geographic-targeting efforts to date and a discussion by Vermont's electric distribution utilities regarding the proposed new geographic areas. On October 3, 2008, the Board issued a memorandum requesting additional written comments.

Comments were filed by CVPS, GMP, the Group of Municipal Electric Utilities,³ and the Department.

III. POSITIONS OF INTERESTED PARTIES

Below, we summarize the comments submitted by interested parties.

Central Vermont Public Service Corporation

CVPS recommends that the Board continue targeting efforts in the existing geographic areas, with the exception of the Newport area, and expand the program to the following three geographic areas within its service territory: Mendon/Killington, Brattleboro, and Rutland.

The Mendon/Killington area is winter constrained with future load growth in the area dependent on the magnitude of development in the Killington ski area. To date, the ski area has not provided any firm development plans to CVPS. Targeting the Killington area could defer subtransmission upgrades that would be necessary to accommodate potential future load growth in the Killington area.

The Brattleboro area is summer constrained, with the summer peak projected, by CVPS, to grow at 1% to 2% per year. Targeting the Brattleboro area could defer subtransmission

3. The Group of Municipal Electric Utilities include: Barton Village Inc. Electric Department; Village of Enosburg Falls Water & Light Department; Town of Hardwick Electric Department; Village of Hyde Park Electric Department; Village of Jacksonville Electric Company; Village of Johnson Water & Light Department; Village of Ludlow Electric Light Department; Village of Lyndonville Electric Department; Village of Morrisville Water & Light Department; Village of Northfield Electric Department; Village of Orleans Electric Department; Town of Readsboro Electric Light Department; and Swanton Village Inc. Electric Department.

constraints associated with an outage of the N-186 line during peak summer conditions. CVPS identified a year of need of 2013 for this constraint.

The Rutland area is summer constrained, with the summer peak projected, by CVPS, to grow at 2% per year. Targeting the Rutland area could defer transmission constraints associated with the loss of the North Rutland or Cold River 115/46 kV transformer and thermal overload of the Cold River-to-North Rutland 115 kV line. CVPS identified the constraints on the North Rutland and Cold River transformers as existing, and stated that they were identified as in need of remedy in the VELCO Long-Range Plan as of 2006. The constraint on the Cold River-to-North Rutland line is projected to occur in 2016.

CVPS notes that it is proposing the three new areas in response to a notice by Efficiency Vermont that expansion of targeted areas would be necessary if Efficiency Vermont were to continue use of its commercial-customer direct-installation contractor. CVPS further states that it would rank the existing geographic areas as the highest priority and then, in decreasing order, Rutland, Brattleboro and Mendon/Killington.

CVPS contends that the proposed areas are near the existing targeted efforts and that "existing program designs and contractors could be used to garner capacity savings." CVPS further states that the targeted efficiency measures are cost-effective, that transmission and distribution upgrades are likely to be necessary in the identified areas, and, consequently, that "the delivery of targeted services in these areas would result in 'no regrets.'"

Finally, CVPS provides information regarding the efforts it is taking to supplement Efficiency Vermont's programs to increase the likelihood that the geographic-targeting efforts will defer or negate the need for transmission and distribution upgrades in the targeted areas.

Green Mountain Power Corporation

GMP proposes that the existing Chittenden County targeted area be expanded to include the Airport and Town Line substations. GMP states that the original area was determined without conducting a load-flow analysis; the results of a load-flow analysis showed that inclusion of the two substations in the geographic-targeting efforts could help to alleviate the constraint.

GMP states: "As long as the programs are cost effective absent the benefits of deferring a targeted T&D [transmission and distribution] project, the investment will be a benefit to Vermont even if the geographic-targeting does not ultimately defer a particular project." GMP recommends that geographic-targeting efforts be continued through 2011, unless and until new information demonstrates otherwise.

Finally, GMP provides information regarding the efforts it is taking to supplement Efficiency Vermont's programs to increase the likelihood that the geographic-targeting efforts will defer or negate the need for transmission and distribution upgrades in the targeted areas.

Group of Municipal Electric Utilities

The Group of Municipal Electric Utilities does not support expansion of geographic targeting at this time. The Municipal Electric Utilities state that this is a transitional time, due to the recent establishment of the Vermont System Planning Committee and the Board investigation into possible changes to the structure of the EEU.⁴ The Municipal Electric Utilities suggest that the Board and parties could re-examine this issue in the future.

Department of Public Service

The Department supports continuation of targeting efforts in the Chittenden County, St. Albans, and Southern Loop areas. However, the Department is currently developing an evaluation plan of the geographic-targeting program and expects to complete the evaluation in 2009. The Department states that "[i]nitial results indicate significant peak demand reductions have been achieved" in the existing geographically targeted areas, and that there is still significant opportunity to reduce peak demand in these areas. The Department further indicates that it does not support fuel switching in the targeted areas, which Efficiency Vermont has stated provides some of the remaining potential in the existing targeted areas.

The Department proposes that GMP's Airport and Town Line substations be included in the Chittenden County targeting efforts. The Department recommends that the Mendon/Killington area not be included in the targeting efforts because the uncertainty regarding

4. See Dockets 7081 and 7466, respectively.

load growth in this area leads the Department to believe that "it is better to comprehensively achieve cost effective measures across the state." Further, the Department states that targeting the Brattleboro and Rutland areas is premature given the identified year of need.⁵ The Department concludes that reducing load in the new geographic areas identified by CVPS could reduce some exposure to overloads, but a short-term delay in implementing geographic targeting in these areas "will not appreciably impact the ability of efficiency to defer or avoid a transmission or distribution upgrade" given the ability of Efficiency Vermont to ramp-up targeting activities.

Additionally, the Department maintains that efficiency dollars are better spent to achieve more cost-effective efficiency statewide as aggressive pursuit of targeted efficiency would lower achieved savings per dollar invested. The Department proposes that the Board revisit the issue of targeting in 2009 after more information becomes available from the Department's evaluation work and the work of the Vermont System Planning Committee.

The Department recommends that, in choosing geographic areas, the Board prioritize constrained areas where the benefits of efficiency investments would accrue to all ratepayers, as opposed to the ratepayers of a particular distribution utility.

The Department proposes that any budgeted money not spent on geographic targeting in 2009 be carried over into the 2010 and 2011 geographic-targeting budgets.

Finally, the Department maintains that commercial lighting direct install ("Lighting Plus"), a program specific to targeted areas, has saturated the existing targeted areas. The Department contends that continuing Lighting Plus would avoid costs associated with program ramp-up and ramp-down. The Department recommends continuing the Lighting Plus program in the newly identified GMP area and possibly expanding the program to different usage groups or expanding the program statewide using an incentive level lower than 100%.

5. In its October 15, 2008 filing, CVPS indicated that the Department had incorrectly identified the year of need for the Rutland constraint as 2016; CVPS identifies the constraint on the Cold River and North Rutland transformers as existing, while the potential constraints on the Cold River-to-North Rutland line is projected to occur in 2016.

IV. DISCUSSION

Based on written filings and the October 1st workshop held by Board staff, the Board has determined that it is appropriate to continue the geographic-targeting efforts in the existing St. Albans, Southern Loop, and Chittenden County areas. The Board has also determined that it is appropriate to expand the Chittenden County area to include the additional areas identified by GMP and to add the new area in Rutland identified by CVPS.

In the August 29 Order, the Board stated that the geographic-targeting efforts would continue, at least through 2011. The geographic-targeting efforts have not been in place for a sufficient period of time to allow for a full analysis of the impacts of the program. However, early results indicate that geographic targeting has been successful.⁶

The Department and the electric utilities recommend that the current targeting efforts should be continued. We agree, and direct Efficiency Vermont to continue its geographic-targeting efforts in the Southern Loop, Chittenden County, and St. Albans areas. It does not appear that all of the geographic-targeting efforts have reached a saturation point in the existing areas. The Department's evaluation should provide some information regarding the extent of savings that are achievable in the geographically-targeted areas. Efficiency Vermont may only implement measures that are cost effective; however, if some targeting measures are only marginally cost effective, the money spent on such measures might be able to be used more efficiently elsewhere.

GMP has refined its original analysis of the constraints in the Chittenden County area and proposes that two additional substations be included in the geographic-targeting efforts. All parties support this inclusion. We direct Efficiency Vermont to expand its geographic-targeting efforts in the Chittenden County area to include the areas served by the GMP Airport and Town Line substations.

CVPS has identified an existing transmission constraint in the Rutland area. Given that the constraint exists now, and a second potential constraint could occur in 2016, we conclude that

6. The Department expects to have verified data and evaluation results available in 2009 for the existing geotargeted areas.

the geographic-targeting efforts should be expanded to include the Rutland area and direct Efficiency Vermont to implement geographic targeting in that area.

We are mindful that the EEU budget can only provide so many resources to address transmission and distribution constraints through geographically targeted energy efficiency measures. CVPS has proposed two additional areas for inclusion in the geographic-targeting program. The constraints in the Mendon/Killington area are dependent on uncertain development plans associated with the ski area. Given the high level of uncertainty for this area with respect to potential development, we determine that geographic targeting should not be implemented at this time. If the ski area provides concrete plans for development, and CVPS provides further information that such development would create identifiable constraints on the system that could be addressed by targeted efficiency measures, we will consider adding this area to the geographic-targeting efforts in the future.

The Brattleboro area represents potential subtransmission constraints in the 2013 time frame. CVPS has stated that the current targeting efforts and the newly identified Rutland area represent higher priorities than the Brattleboro area. At this time we do not expand the geographic-targeting program to include the Brattleboro area, with the exception of implementing the Commercial Lighting Direct Install program, as noted below. However, we are willing to revisit this area in any future review of areas for geographic targeting.

Continuing the geographic-targeting activities at the existing and new areas will allow for a more complete test of these activities' potential value, given that current activities have not been in place long enough to make such an assessment. As long as the programs are cost effective, the investment will be a benefit to Vermont even if the geographic targeting does not ultimately defer a particular transmission project. Further information is needed to determine when geographic areas will reach the saturation point with respect to implementation of current energy efficiency programs. As further information is developed and evaluated, it is possible that the geographic-targeting program may be modified.

Commercial Lighting Direct Install Program

One of the programs specific to geographic targeting, Commercial Lighting Direct Install, has been successful at reducing peak loads and may have saturated the currently targeted areas. Workshop participants agreed that this program should be continued and expanded to areas outside the geographic-targeted areas. The continuation of the Direct Install program will also avoid costly ramp-up and ramp-down expenditures associated with the development of new efficiency programs.

Given that the Direct Install program has been successful in the existing areas, Efficiency Vermont should examine continuing the program in other areas. The priority for the Direct Install program should be in the newly identified areas in Chittenden County and Rutland. Although we are not directing Efficiency Vermont to implement other geographic-targeting efforts in the Brattleboro area, the effectiveness of the Direct Install program, coupled with the future constraints in the Brattleboro area, lead us to conclude that Efficiency Vermont should consider implementing this program in the Brattleboro area identified by CVPS.

Fossil-Fuel Switching

The Department does not support fuel switching in geographic areas. The Board is not addressing this issue in today's Order, but will explore this issue further in discussions with Efficiency Vermont during contract negotiations.

Budget Carryover

The Department recommends that "if the Ordered budget is greater than needed resources to reach the remaining potential in [the geographically-targeted areas] in 2009, the remaining dollars be carried over into the 2010-11 budgets." We are not addressing the issue of carryover of unspent geographic-targeting funds at this time. We do not know now if there will be a request to carry over funds from 2009. If so, any decision regarding whether the funds should be carried over must be based upon the particular facts at that time.

Utility Responsibilities

In our January 8 Order, we stated:

We emphasize that the Board's adoption of the utilities' recommendation does not obviate each utility's individual responsibility for resource planning for that region. Each utility that will receive targeted energy efficiency services within its service territory must work closely with Efficiency Vermont to ensure adequate reliability for the identified area.

CVPS and GMP have both indicated that they are currently taking steps to supplement the geographic-targeting programs in their respective service territories to increase the likelihood of deferring or negating the need for transmission and distribution upgrades in the targeted areas. In order for the geographic-targeting programs to be successful, CVPS and GMP must continue such efforts.

V. CONCLUSION

Early results of the existing geographic-targeting efforts indicate that we should continue the program unless additional information informs us otherwise. We direct Efficiency Vermont to continue the geographic-targeting program in St. Albans, Southern Loop, and Chittenden County areas, and expand the efforts to include two additional substations within the Chittenden County area and the Rutland area identified by CVPS. Additionally, we determine that Efficiency Vermont may implement its Direct Install program in the Brattleboro area.

VI. ORDER

IT IS HEREBY ORDERED, ADJUDGED AND DECREED by the Public Service Board of the State of Vermont that:

1. Efficiency Vermont shall continue the geographic-targeting efforts in the Southern Loop, Chittenden County, and St. Albans areas.
2. The geographic-targeting efforts shall be expanded to include Green Mountain Power Corporation's Airport and Town Line substations in the Chittenden County area and the Rutland area identified by Central Vermont Public Service Corporation.
3. Efficiency Vermont may implement its Direct Install program in the Brattleboro area identified by CVPS.

Dated at Montpelier, Vermont, this 4th day of November, 2008.

<u>s/ James Volz</u>)	
)	PUBLIC SERVICE
)	
<u>s/ David C. Coen</u>)	BOARD
)	
)	OF VERMONT
<u>s/ John D. Burke</u>)	

OFFICE OF THE CLERK

FILED: November 4, 2008

ATTEST: s/Susan M. Hudson
Clerk of the Board

NOTICE TO READERS: This decision is subject to revision of technical errors. Readers are requested to notify the Clerk of the Board (by e-mail, telephone, or in writing) of any apparent errors, in order that any necessary corrections may be made. (E-mail address: psb.clerk@state.vt.us)

Appeal of this decision to the Supreme Court of Vermont must be filed with the Clerk of the Board within thirty days. Appeal will not stay the effect of this Order, absent further Order by this Board or appropriate action by the Supreme Court of Vermont. Motions for reconsideration or stay, if any, must be filed with the Clerk of the Board within ten days of the date of this decision and order.